

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1           1. (currently amended) A hearing aid ~~with~~ comprising a  
2 microphone system ~~(1)~~ and a subsequent analog/digital  
3 converter ~~(5)~~, wherein the microphone system ~~(1)~~ is  
4 encapsulated in an electromagnetic shielding case ~~(3)~~ forming  
5 a shielded microphone system unit, and further wherein the  
6 analog/digital converter ~~(5)~~ is mounted on an ~~outside~~ outer  
7 surface of the electromagnetic shielding case ~~(3)~~.

1           2. (currently amended) The hearing aid as claimed in  
2 claim 1, wherein the analog/digital converter ~~(5)~~ is  
3 encapsulated in a converter shielding case ~~(7a, 7b)~~ and is  
4 mounted to said outer surface via said converter shielding  
5 case which is set to the electrical potential of the  
6 electromagnetic shielding case ~~(3)~~ of the microphone system.

1           3. (currently amended) The hearing aid as claimed in  
2 claim 1, wherein the microphone system ~~(1)~~ and the  
3 analog/digital converter ~~(5)~~ are detachably combined in a  
4 modular manner.

1           4. (canceled).

1           5. (currently amended) The hearing aid as claimed in  
2 claim 2, wherein the microphone system ~~(1)~~ and the  
3 analog/digital converter ~~(5)~~ are detachably combined in  
4 modular manner.

1           6. (currently amended) The hearing aid as claimed in  
2 claim 1 ~~2~~, wherein said analog/digital converter comprises

3 first and second analog inputs  $\{E_1, E_2\}$ , said first analog  
4 input  $\{E_1\}$  having a first input impedance  $\{Z_1\}$  and a first  
5 input gain  $\{G_1\}$ , said second analog input  $\{E_2\}$  having a  
6 second input impedance  $\{Z_2\}$  and a second input gain  $\{G_2\}$ , and  
7 wherein either at least one of said first and second input  
8 impedances  $\{Z_1, Z_2\}$  and of said first and second input gains  
9 are respectively different from one another ~~or said first and~~  
10 ~~second input gains  $\{G_1, G_2\}$  are different from one another.~~

1 7. (canceled).

1 8. (previously presented) A hearing aid comprising:  
2 a microphone;  
3 an electromagnetic shielding case for encapsulating said  
4 microphone; and  
5 an analog/digital converter mounted on an outside outer  
6 surface of said electromagnetic shielding case and  
7 electromagnetically shielded from said microphone.

1 9. (previously presented) A hearing aid comprising:  
2 a microphone;  
3 an electromagnetic shielding case for encapsulating said  
4 microphone; and  
5 an analog/digital converter mounted in such a manner that  
6 it is electromagnetically shielded from said  
7 microphone.

1 10. (new) The hearing aid as claimed in claim 9,  
2 wherein said analog/digital converter is fixed to a flexible  
3 sheet coated with a conducting path of the digital output of  
4 said converter.

1 12. (new) The hearing aid of claim 9, wherein an

2 analog output of said microphone system is led through said  
3 shielding case of said microphone system towards said flexible  
4 sheet.

1 13. (new) A microphone system with a size for applying  
2 in a hearing aid comprising:  
3 a microphone system encapsulated in an electromagnetic  
4 shielding case; and  
5 an analog/digital converter mounted on an outer surface  
6 of said electromagnetic shielding case.

1 14. (new) The system of claim 13, wherein said  
2 analog/digital converter is mounted on said outer surface via  
3 an electromagnetic shielding case of said analog/digital  
4 converter.

1 15. (new) The system of claim 13, wherein said  
2 analog/digital converter is fixed to a flexible sheet having a  
3 conducting path connected to the digital output of said  
4 converter, said sheet with said converter being encapsulated  
5 in an electromagnetic shielding case mounted to said outer  
6 surface.

1 16. (new) The system of claim 13, further comprising an  
2 electrical connection from an output of said microphone  
3 through said shielding case of said microphone to said  
4 flexible sheet.